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### **PREFACE**

The Texas-Nuevo León Strategic Environmental Plan (SEP) is the result of a commitment made at the *Ten State Retreat: A Regional Approach to the U.S.-Mexico Border Environment* in Austin, Texas in November of 1996. The plan is based on the model provided by the Nuevo León State Environmental Plan 1995-2020. That the SEP should be the first formal agreement of its type between neighboring states is a product of the considerable coordinating efforts of the Texas Natural Resource Conservation Commission (TNRCC) in Austin, and the Subsecretaría de Ecología (SSE) in Monterrey.

This plan is part of a learning process undertaken by the U.S. and Mexican states sharing the international border, and as such is neither perfect nor comprehensive. At the time of its completion, both Texas and Nuevo León were undergoing a period of reorganization in their state governments, the first due to the conclusion of the legislative session, the second as a result of state elections. This plan should be seen as evidence of the commitment that each of the two states maintain to working together for common environmental priorities regardless of the political or economic changes the future may hold.

The intent of the SEP is to provide a framework for cooperation for the state environmental agencies of Texas and Nuevo León. The TNRCC and the SSE will each appoint a liaison who will be responsible for the coordination of activities under the SEP. The liaisons will arrange an annual meeting with the purpose of developing a twelve-month bi-state action plan with a calendar of prioritized activities, and mechanisms to ensure its fulfillment.

### The goals of the SEP are:

- 1. To guide effective interagency cooperation and make the best use of existing resources towards multimedia state priorities for environmental protection.
- 2. To serve as a basis to leverage additional and outside resources to support actions prioritized in this plan.

Both states will develop the following four strategies to meet their common interests:

- ! Exchange Information
- ! Facilitate Technical Exchange
- ! Coordinate Activities and Programs
- ! Obtain contribution of human, technical and economic resources from industry, academic institutions and professional organizations

### I. INTRODUCTION

The unique border region shared by the United States and Mexico provides challenges and opportunities to the states and local communities which compose it. On the Texas-Nuevo León border, the Colombia Bridge is a principal route of commerce between these states and their respective nations and is an important symbol of the links they have in common. The state governments of Texas and Nuevo León share, among other things, a commitment to working for a clean environment. Represented by the Texas Natural Resource Conservation Commission in Texas and the Subsecretaría de Ecología in Nuevo León, these states have outlined specific objectives and areas for cooperation in this Texas-Nuevo León Strategic Environmental Plan.

The SEP is a result of a commitment made by representatives from the state agencies responsible for environmental quality and protection from Arizona, Baja California, California, Chihuahua, Coahuila, New Mexico, Nuevo León, Sonora, Tamaulipas and Texas at the "Ten State Retreat: A Regional Approach to the U.S. Mexico Border Environment" in Austin, Texas on November 18-19, 1996. The objective of the Retreat was to exchange information and agree on actions supporting the environmental issues addressed at the XIV U.S.-Mexico Border Governors' Conference (BGC) on May 31, 1996 in Santa Fe, New Mexico. The state representatives agreed that the most effective and efficient way to improve the quality of the environment and to protect the health of the citizens in the border region is through coordination and collaboration. The environmental officials from the ten states exchanged information regarding the issues facing their agencies, their jurisdictions, and They then pinpointed desired outcomes and strategies for successful existing programs. environmental quality within four areas: pollution prevention; data exchange and cooperative information gathering; low-cost community-based solutions to environmental problems; and technical exchange and strategy sharing. In a signed document (Appendix I), each of the ten states committed to working together with at least one neighboring state in the following six areas:

- 1. Establish programs for reuse, reduction, and recycling, including water conservation.
- 2. Develop a border-wide electronic environmental information sharing mechanism, support development of Geographic Information System databases and pursue compatible methods and measures to enable information sharing.
- 3. Develop programs for volunteers (including professionals), and establish a recognition/award system.
- 4. Collaborate with the maquiladoras and other industries as a source of technology and information exchange.
- 5. Develop state-to-state environmental strategic plans.
- 6. Develop and implement low-cost and clean technologies.

At the XVth Border Governors' Conference in Saltillo, Coahuila on June 6, 1997, environmental officials from the ten states met again and reported on the progress they had made since the last BGC. They also defined specific strategies for moving towards a clean environment in the border region, summarized in their Conclusions (Appendix II.) Each state agreed to:

- 1. Establish action plans "Clean Border for Sustainable Development" with an award system recognizing groups carrying out activities that benefit the environment in each one of the ten border states.
- 2. Support U.S.-Mexico border local governments in their environmental priorities.
- 3. Promote the participation of industrial, academic and educational sectors in state environmental programs.
- 4. Hold a meeting of the Ten States in November of 1997 to exchange experiences and further develop mutually beneficial joint activities.

At the BGC, Texas and Nuevo León signed an agreement (Appendix III) committing to complete the SEP within 60 days. Both states believe that they must work together in order to achieve 1) a clean border; 2) watershed and airshed approaches to environmental issues; and 3) strengthened environmental management capacity of state agencies.

### II. GEOGRAPHIC DESCRIPTION

#### **Texas**

Texas is located in the southern central United States, bordering the US states of New Mexico on the west, Oklahoma to the north, Arkansas to the northeast, and Louisiana to the east; the Gulf of Mexico also lies to the east. Across the Rio Grande, Texas borders the four Mexican states of Chihuahua, Coahuila, Nuevo León, and Tamaulipas. Texas' geographical size plays a significant factor is the diversity of its natural and economic resources. There is a wide spectrum of weather conditions as a result of the sheer size of the state, which is 266,807 square miles (677,690 sq. kilometers). Texas is divided by four physical regions: the Great Plains, the Basin and Range Province, Interior Lowlands, and the Gulf Coastal Plains.

Rainfall varies within the four physical regions, getting drier going from east to west, from 58" annually in Beaumont to 7" annually in El Paso, or from lush pine forests in the east to Chihuahuan desert in the west. Rainfall in Texas over a recent 20 year period averaged 29.4 inches per year (746 millimeters), ranging from a low of 21.1 annual average inches (537 mm) to 37.94 inches (964 mm).

Because rainfall in Texas is often "flashy"--there are sudden bursts of thunderstorms that run off quickly--more than 5,700 reservoirs have been built to store surface water. The 212 current major reservoirs have a total surface area of 1,695,647 acres (677,578 hectares) and a conservation storage

capacity of 40,825,072 acre-feet (50,357,183,209 cubic meters). Texas also depends on ground water, relying on eight major aquifers and several minor ones. About three quarters of the state lies over aquifers, and many communities rely wholly or in great part on ground water, including San Antonio and El Paso.

Starting from the Gulf Coast plains and crossing westward through the Edwards Plateau, several mountain ranges are partly or wholly in west Texas, with peaks rising to 8,700 ft. (2,651 meters). With diverse climates and geographical regions, several ecosystems exist in Texas, resulting in a variety of flora and fauna. Great diversity is also seen in Texas soils, with over 1,100 soils series in 20 major soil subdivisions. Recent reports show that more than twice as much soil is being lost to wind erosion than to sheet and rill erosion, and that about 21 percent of the land is "prime land."

### Nuevo León

The state of Nuevo León is located in the northeastern part of Mexico. To the north it borders with the states of Coahuila, Texas and Tamaulipas. To the west it borders with Coahuila, San Luis Potosí and with Zacatecas. To the south it borders with San Luis Potosí and Tamaulipas, with which it also shares its eastern boundary. Its surface covers 64,081.94 Km². The state includes important portions of the three big natural regions - or physiographic regions - of the country: the Eastern Sierra Madre, the Great North American Plains and the Coastal Plains of the Northern Gulf.

The Monterrey metropolitan area is located at an approximate height of 500 meters above sea level and it is surrounded by the Eastern Sierra Madre, the Cerro de la Silla, el Cerro de las Mitras and the Cerro del Topo Chico. These mountainous elevations constitute a natural physical barrier for the circulation of the wind and prevent the evacuation of the contaminated wind towards the exterior of the zone. Because of its geographic location, the metropolitan area is subject to the influence of the anti-cyclonic systems coming from the Gulf of Mexico which create a great atmospheric stability, inhibiting the vertical mixture of air.

Very extreme semi-dry climates predominate in Nuevo León. The precipitation is very scarce, even though it has regions that register annual rains greater than 800 mm. The general annual measure for the state varies between 300 and 600 mm while the annual medium temperature is between the range of 14°C to 30°C. The dry and semi-dry climates are distributed mainly in the northeastern part, which forms part of the Great North American Plains, and in the southwestern region, separated from the first one by the heights of the Western Sierra Madre. In the lower areas of the sierra region, in the central and south zone of the state and in the greater part of the San Juan river the semi-warm, moderate and semi-cold climates are more common.

### III. SOCIAL AND ECONOMIC ISSUES

### **Texas**

The state of Texas is composed of 254 counties and several hundred more towns, with six cities of 450,000 people or more. Texas' population is estimated to grow from 18.8 million people in 1995 to 20.4 million in 2001, an increase of almost 10 percent. The state gross product is also expected to grow by approximately \$65 billion during that period, an increase of 15 percent. Texas relies heavily on trade, manufacturing, services, construction and mining for sales. The projected economic and population growth will present significant challenges to the TNRCC in protecting our natural resources and environment.

Texas' economy, which twenty years ago was heavily dependent on the oil and gas industry, now has diversified in manufacturing, especially in computers, electronics and petrochemicals. Tradeparticularly with Mexico-has increased greatly since the implementation of the North American Free Trade Agreement. The 7.9% increase in gross sales in 1994 over 1993 reflects the soundness and continued growth of the Texas economy.

Much of the growth is expected to take place in unincorporated areas where local governments generally lack the authority to administer environmental programs and will make it even more difficult for the state to respond to these environmental demands. Although these challenges will exist in all regions of the state, they will be most acute in the state's rapidly growing urban centers on both sides of the international border with Mexico and along the Interstate Highway 35 corridor.

### Nuevo León

The state of Nuevo Leon is composed of 51 municipalities and has a population of 3,549,273 which is estimated to reach four million by the year 2000 and five by 2015. Currently this is a state that has a wide and growing productive infrastructure in the primary and industrial sectors which have earned it a place of great importance in Mexico. Monterrey, its state capital, has become one of the three most important cities in the country in just in a few years. Its metropolitan area - the municipalities of Apodaca, Cadereyta, Escobedo, García, Guadalupe, Juárez, San Nicolás de los Garza, San Pedro Garza García and Santa Catarina, representing 83.5% of the state's population - is an industrial center for the production of bricks, batteries, ceramic for construction, cement, soft drinks, machinery and equipment, etc. Among other industry types, there is the automotive, textile, construction, food, beer, non metal minerals, electric and electronic. Cadereyta Jiménez has one of the largest oil refineries in the country, where a wide variety of products derived from oil, such as lubricants and petrochemicals can be obtained.

Monterrey's metropolitan area concentrates 95% of the industrial activity in the state with 10,000 industrial and service businesses. The manufacturing industry supplies 35% of the Gross State Product, followed by service businesses with 30%, commerce with 22% and transportation with 7%.

About 1.4% of the industries are located on the banks of the San Juan river, which drains into the Rio Grande. It should be mentioned that the state of Nuevo Leon provides 6% of the Gross National Product.

The transportation sector has a strategic importance with regards to regional and urban development. It is estimated that within the Monterrey metropolitan area there are more than 1.5 million persons traveling daily and that the number of daily trips amounts to 5.5 million. With regards to the distribution of trips in the mass transportation system, 3.4 million trips are made, while 1.9 million trips are made by automobile. With the accelerated urban growth of Monterrey's metropolitan area, it is estimated that for the year 2000 the vehicle fleet will increase to 1.5 million units and the average length of the trips will increase from 7.5 Km to 20 Km.

With regards to the infrastructure in the metropolitan area of Monterrey: the potable water distribution system provides service to 96% of the population; the coverage of the sewage system is approximately 90%; currently 100% of the waste water generated is treated. On the other hand the garbage collection system covers 90% of the state population.

### IV. CURRENT ENVIRONMENTAL STATUS

### **Texas**

### Air Quality

The growth of large urban areas has historically been associated with deterioration of air quality in the United States (US), as shown by the many urban areas that exceed US federal air quality standards and deemed nonattainment under the Federal Clean Air Act. Texas has four urban areas (Dallas-Fort Worth, Houston-Galveston, El Paso, and Beaumont-Port Arthur) that do not attain the federal standard for ozone and one area (El Paso) that is nonattainment for carbon monoxide and particulate matter. Texas is also fortunate that it has several large urban centers which at this time continue to comply with all federal air quality standards.

Three factors are primarily responsible for the relationship between urban growth and air quality. First, population growth often follows the expansion of industries that generate significant emissions. Second, growth is almost always associated with increased numbers of motor vehicles--major contributors to some air pollution problems. Third, population growth also means increased emissions from various individual activities and from the small businesses necessary to support a larger population.

For Texas, the potential impact of growth on air quality presents several challenges. One challenge is to limit the new emissions associated with desirable growth in nonattainment areas. The approaches to doing this are largely mandated in federal law. New industrial sources in these areas are required

to counter any new emissions they will produce by retiring or reducing other emissions sources. Additionally, federal requirements for achieving reductions on a net growth basis will present severe difficulties in areas such as Houston, where reductions to meet federal standards are likely to be large even before growth is taken into account.

Another major challenge will be to help near nonattainment areas accommodate growth without falling into nonattainment. Consequently, efforts to assist these areas will likely need to be expanded. Proposed changes in the federal ozone standard will also be a major factor influencing attainment status of areas such as Austin, Corpus Christi, San Antonio, Victoria, and Longview-Tyler-Marshall.

Growth is also likely to be characterized by further increases in complaint workloads, which have risen sharply over the last decade. This is partly because new industries will find it increasingly difficult to find remote locations and because in many communities, residential areas are being established close to existing industrial facilities.

### Water Supply

Increased population and economic growth will continue to stretch the state's water supplies and will require the state to manage its finite water resources more effectively. Total water consumption is expected to rise from 14.8 million acre-feet (18.26 billion cubic meters) in 1995 to an estimated 16.5 million acre-feet (20.19 billion cubic meters) in 2002, an increase of almost 11 percent. Approximately 21 percent of the state's annual water use is for municipal purposes and 62 percent for irrigation, with the remaining 17 percent for other uses.

Municipal water needs are expected to exceed available supplies in the next 15 to 50 years for the Corpus Christi, San Antonio, Houston, and Austin regions. A recent drought has also been a major problem. Water supply shortages such as those being experienced in the Rio Grande Valley could have severe ramifications for both drinking water and agriculture, and the TNRCC and the Texas Water Development Board (TWDB) are working together to respond to the drought conditions.

Water marketing has been proposed as one of the best means to meet additional water needs. In the Texas system of water rights, water rights can be sold or leased, and the transfer may be permanent or temporary. In an open market, purchasers could pay less for the water or water rights than would be required to develop new water supplies, assuming that new water is available. The newly acquired supply could also be put to use much more quickly.

Many of the state's aquifers are being drained faster than they are being replenished. To help counter this impact of continual growth, under Senate Bill 1 of the 75th legislature, the Commission works with the TWDB and local districts to conserve and ensure better management of ground water resources.

### Water Quality and Treatment

Economic and population growth in all major urban areas in the state could significantly affect surface and groundwater quality. Permitted wastewater systems have more than doubled from 15,500 to over 38,000 during the last seven years. Effluent from domestic discharges is now approximately 6,908 million gallons per day (gpd) (26.11 million cubic meters) and industrial discharge is about 54,604 million gpd (206 million cubic meters). As a similar rate of growth in discharges is expected to occur in the next five years, it is anticipated that applications for wastewater discharge permits will increase. Continued monitoring and enforcement of permits will also be needed to ensure the proper design, installation, and operation of these systems.

Increased monitoring of ambient water quality will also be necessary as discharges to affected streams increase. Regional treatment plans may need to be developed to ensure that permitted wastewater discharges attributed to economic and population growth do not approach or exceed the ability of receiving waters to absorb discharges and still maintain standards. Although surface water quality in Texas has improved significantly due to advanced methods of treatment of wastewater streams (point source), the pollution from nonpoint sources in the urban and agricultural sectors continues to pose major challenges and will also increase as population and economy grow in urban areas.

### Waste Management

Typically, increases in population and economic growth have resulted in increased waste generation-municipal solid waste (MSW), industrial solid waste and hazardous waste. However, industrial and hazardous wastes (IHW) generation declined in 1994 and 1995 despite population increases and economic growth. This trend is likely to continue as industry improves production processes and environmental management systems to avoid future liability and current costs associated with managing such wastes; a similar trend is occurring in municipal solid waste where waste disposed of per capita is decreasing. These MSW achievements in the face of continued growth can be attributed to local recycling and composting programs which have been encouraged by the TNRCC. If not for recent and projected economic and population growth, the total volume of MSW disposed of in Texas would be declining.

With very few exceptions, it is anticipated that Texas' commercial facilities will continue to have adequate capacity over the next few years for most hazardous wastes. Certain kinds of hazardous waste management facilities are unavailable in Texas (for example, zinc recovery), but the statewide demand for these facilities is small. Nonhazardous disposal capacity at industrial facilities is currently under evaluation, but preliminary analyses suggest that there is likely to be sufficient disposal capacity to manage the 1998 projected demand.

Many MSW facilities have closed over the past few years, unable to meet new federal requirements. More than 300 landfills closed between June 1995 and 1990, a 61 percent decrease to 191 open and

active landfills. Despite these closures, Texas currently has about 20 years of municipal solid waste disposal capacity. The interstate movement of wastes can also affect the available capacity for IHW and MSW on a day-to-day basis: the potential exists for Texas' solid waste disposal capacity to be diminished by waste imports from other states with solid waste capacity shortfalls and high disposal fees, or where required by law, such as in Mexico (Mexican Law and the La Paz agreement requires maquiladora wastes to be returned to the United States).

Continued closures of MSW landfills in Texas means many communities must transport their waste greater distances to the nearest landfill, resulting in higher hauling costs and possibly contributing to greater levels of illegal dumping noted by many regional planning groups. Closed landfills no longer in operation also come under the agency's jurisdiction and could become subject to future remedial or enforcement actions if groundwater contamination or methane gas buildup is discovered.

Population growth means more cars, and thus greater volumes of auto-related wastes such as oil and other lubricants, used tires, batteries and scrap metal. When unaddressed, such wastes have resulted in tire dumps, lead contamination from accumulated batteries, and ground water contaminated from improper disposal of used oil. Although programs have been implemented to deal with these wastes, the upward trend in the quantity of such wastes will remain a challenge for solid waste disposal in Texas.

Another ramification of growth is an increase in property transfers (as reflected by the number of home sale listings and industrial building permits). To protect against future environmental liability, many purchasers conduct audits and require the seller to remediate contamination prior to purchasing the property to safeguard their interests; these audits may increase the number of Superfund sites discovered. A strong growth rate and resulting property transactions will also likely cause a high demand for voluntary site cleanups to be processed and overseen. The voluntary cleanup program means contaminated properties (brown fields) are redeveloped, thus helping preserve pristine areas of the state and reducing urban sprawl.

### Nuevo León

### Air Quality

As a starting point for the design of air pollution control strategies in the metropolitan area of Monterrey, the Under-Secretariat of Environment began the operation of an air quality monitoring network in 1992. The air quality monitoring network currently has five fixed continuous monitoring stations, a mobile monitoring station and a Sodar Doppler system for measuring meteorologic conditions.

An analysis of the hours exceeding the air quality standard in the 1993-1996 period shows that the contaminant that remained for the greatest number of hours above the air quality standard turned out to be particles of less than 10 microns, followed by ozone.

The behavior of the particles' maximum concentrations follows a pattern that establishes a considerable increase during the winter months and a notable decrease during spring and summer. This fact is explained by the meteorologic conditions which make the dispersion of contaminants difficult during the cold months. In comparing years, the descending trend in the number of hours exceeding the standard should be noticed. In fact, in 1995 and 1996 this number was reduced more than 50%. The main particle emission sources, according to the last emissions inventory, are of the industrial type and soil erosion.

Ozone is the contaminant which occupies the second place in importance with regards to the number of times the air quality standard was exceeded. The number of hours above the ozone standard usually increases in the summer and occasionally during the winter months. There is a downward trend in the number of violations during the 1993 to 1995 period. However, this increased again in 1996.

The last air emissions inventory carried out in 1995 for the metropolitan area of Monterrey shows that transportation is responsible for half of the emissions. In order to prevent and control the contaminating emissions which are coming from automotive vehicles in circulation, an inspection/maintenance verification program, which is still in operation, was established in 1991 in the Monterrey metropolitan area.

As a final point, since March of 1996, the government of the State of Nuevo León initiated the 1997-2000 Air Quality Management Program for the Monterrey metropolitan area, which includes 31 actions to combat air pollution.

### Water Quality

The high number of industrial and service companies which discharge into the sewage system and the wide variety of industrial processes in the Monterrey metropolitan area propitiated the implementation of a Discharge Control Program for waste water. This program began activities in 1994 and has been developed in close collaboration with the SSE and the Water and Sewage Services of Monterrey. Its main objective is the establishment of specific waste water discharge conditions for non domestic generators to the sewage system.

There are currently 6,000 non domestic waste water generators registered. Local limits for waste water discharge have been developed for 100% of these generators, all of whom are currently in the implementation phase. By carrying out an analysis of discharged contaminants by industry type, it is usually found that a given industry type provides more than 80% of a specific contaminant. It was also observed that more than 70% of some of the specific contaminants are generated by a reduced number of industries, which simplifies locating the contaminating sources. The main contaminating industry types are chemical, glass, plastic products manufacturing and metal mechanic industries.

The main problems generated by industry in the sewage system are caused by undesirable concentrations of greases and oils, chemical oxygen demand, ammoniacal nitrogen, biological oxygen demand, substances reactive to blue methylene, phosphorous, mercury, lead, organic nitrogen and arsenic.

### Solid Waste Management

The Solid Waste Processing Metropolitan System landfill provides service to the municipalities of the metropolitan area of Monterrey. This landfill was built in 1991, has a surface of 213 hectares and a 15-year useful life. In this site, it is possible to dispose of municipal waste and non-hazardous industrial waste which is classified as equivalent to municipal waste. There are 9 additional landfills for final disposal of municipal waste outside of the Monterrey metropolitan area.

In the state of Nuevo León there is a controlled confinement for final disposal of industrial waste with approximate extension of 800 hectares located 35 Km to the north of the Monterrey metropolitan area. The company in charge of the landfill provides collection, transportation, treatment and final disposal services for hazardous and non hazardous industrial wastes.

Besides the final disposal sites for wastes, there are some places where different types of wastes are deposited in an irregular and inadequate manner. Eight large illegal dumps have been located in the Monterrey metropolitan area.

### V. GOALS, OBJECTIVES AND STRATEGIES

The goals of the Strategic Environmental Plan are:

- 1. To guide effective interagency cooperation and make the best use of existing resources towards multimedia state priorities for environmental protection.
- 2. To serve as a basis to leverage additional and outside resources to support actions prioritized in this plan.

#### **OBJECTIVES**

- ! To establish a technical team responsible for carrying out the actions under the SEP, evaluating progress and making proposals for new activities.
- ! To develop a Clean Border for Sustainable Development (pollution prevention program) for the border region.
- ! To work towards compatible methods of measuring and reporting environmental parameters regarding air and water quality.
- ! To establish an interstate recycling market.
- ! To celebrate a common Recycling Day.

#### **STRATEGIES**

- ! Exchange Information
- ! Facilitate Technical Exchange
- ! Coordinate Activities and Programs
- ! Obtain contribution of human, technical and economic resources from industry, academic institutions and professional organizations.

### VI. ACTION PLAN

#### STRATEGY 1 Exchange Information

The exchange of environmental information will:

- i. enhance regulatory and institutional framework capabilities (e.g., each state will review its regulations under a different perspective, identify training and software needs, and improve public awareness);
- ii. provide a source of innovative environmental management approaches, better planning and more accurate solutions, and
- iii. broaden the scientific and technical knowledge of staff members.

- ACTIONS
- ! Provide information on the general activities and programs administered by the agency in each of the areas of interest.
- ! Inventory databases and identify data, activities or programs relevant to the objectives of the SEP.
- ! Exchange scientific and regulatory information via the Internet.
- ! Identify a designated person to serve as liaison in areas of air and water quality, solid waste management, and pollution prevention and be responsible for the collection and distribution of specified information.

### STRATEGY 2 Facilitate Technical Exchange

The technical exchange will:

- i. strengthen the operational framework by providing recommendations for procedures and resource requirements;
- ii. strengthen the institutional framework by improving capacity to conduct comprehensive inspections, enhancement of staff productivity, promotion of project coordination;
- iii. improve planning capabilities in prediction of critical air pollution episodes, air emissions inventory development, achievement of industrial pretreatment and solid waste management goals; and
- iv. improve the scientific base through specialized software management, quality assurance of environmental data, increased knowledge of health effects of environmental pollution.

#### ACTIONS

- ! Identify designated person to serve as liaison in areas of air and water quality, solid waste management, and pollution prevention and be responsible for the technical exchange activities.
- ! Hold periodic conference calls between agency personnel.
- ! Conduct at least one meeting a year to review activities under this plan, exchange new ideas and experiences, and propose next steps.
- ! Invite participants of state counterpart to technical and environmental workshops such as "Solid Waste Options" of Texas and "ProEco" of Nuevo León.

### STRATEGY 3 Coordinate Activities and Programs

To set up coordinated activities and programs will:

- i. make the best use of time and resources;
- ii. create an opportunity to expand a "border environmental fellowship" along the U.S.-Mexico border and maintain the momentum of the Ten State Border Environment Dialogue; and
- iii. enhance public awareness and public participation.

### ACTIONS

- ! Share calendar of events, as well as organizing and logistic strategies for specific model programs involving the public.
- ! Identify activities and programs with a potential to be developed in coordination.
- ! Establish at least one coordinated activity or program per year involving the public in areas related to air quality, water quality, and solid waste management, and pollution prevention.

# STRATEGY 4 Obtain contribution of human, technical and economic resources from industry, academic institutions and professional organizations

This line of action will:

- i. result in a shared social responsibility in environmental pollution problems;
- ii. promote the development of research studies, thus strengthening environmental management programs; and
- iii. encourage the commitment of highly specialized professionals to the solution of environmental pollution problems.

### ACTIONS

- ! Identify environmental programs carried out by industry that involve community participation in each state and work with industrial associations to match with industrial counterparts in the neighboring state.
- ! Identify research carried out by academic institutions that could be beneficial for the neighboring state and facilitate the exchange.
- ! Identify potential and existing training and education activities of professional associations related to the environment in the state and make the necessary contacts to extend these activities to the neighboring state.